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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,697	01/14/2002	Tsuneo Fujiwara	56853 (70904)	9854

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EXAMINER

BATTAGLIA, MICHAEL V

ART UNIT PAPER NUMBER

2652

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,697

Applicant(s)

FUJIWARA, TSUNEO

Examiner

Michael V Battaglia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4 and 5.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention: A phase correction circuit having the phase control data generation means of:

- a. Fig. 5
- b. Fig. 7
- c. Fig. 8.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 11-15 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

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2. During a telephone conversation with William J. Daley, Jr. on July 15, 2004 a provisional election was made without traverse to prosecute the invention of Fig. 8, claims 1 and 8-15.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 2-7 are drawn to a non-elected invention but are not withdrawn due to the allowability of claim 1, which is generic to all inventions.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

4. The drawings are objected to because:

a. Figures 9 and 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures.

b. In Fig. 9, the labels "CLOCK MARK REPRODUCTION SIGNAL", "FIXED PATTERN REPRODUCTION SIGNAL FP" and "FIXED PATTERN IDENTIFICATION SIGNAL FPA" should appear as they are in Fig. 2, i.e. without any one word running on to a second line.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

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appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Citation of Relevant Prior Art

7. Yokogawa et al (US 4,908,811) discloses using error ratios to synchronize the phase of a data sampling signal with that of record data (Fig. 3). Mori et al (US 5,282,185) discloses a phase correction circuit (Fig. 5) for a disk reproduction device, comprising: channel clock generation means (Fig. 5, element 11) for generating a channel clock whose phase synchronizes with that of

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record data, from a disk-type recording medium in which clock marks showing phase information are preformatted and the record data and a fixed pattern whose phase synchronizes with that of the record data are recorded, by using a reproduction signal of the clock marks (Fig. 1); phase difference detection means (Fig. 6, element 10a) for detecting a phase difference between the phase of the channel clock generated by the channel clock generating means at different sampling points; phase control data generation means (Fig. 6, element 10b) for generating phase control data based on the phase difference data detected by the phase difference detection means; and phase control means (Fig. 5, element 13) for generating a sampling clock whose phase synchronizes with that of the record data, by controlling the phase of the channel clock based on an output of the phase control data generation means. Kuribayashi et al (US 6,314,074) discloses a phase correction circuit that (Figs. 2 and 5) for a disk reproduction device, comprising: channel clock generation means (Fig. 2, element 10) for generating a channel clock whose phase synchronizes with that of record data; phase error detector (Fig. 5, element 22); and a phase controller (Fig. 5, element 21) that adjusts the phases according to the detected phase error. Jinbo et al (US 6,438,081) discloses comparing the phases of a sync clock signal and a binary signal and variably delaying the binary signal to compensate for the difference (Figs. 1 and 4).

Allowable Subject Matter

8. Claims 1-15 are allowable over the prior art of record. None of the references of record alone or in combination disclose or suggest a phase correction circuit for a disk reproduction device, comprising: channel clock generation means for generating a channel clock whose phase synchronizes with that of record data, from a disk-type recording medium in which clock marks showing phase information are preformatted and the record data and a fixed pattern whose phase

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synchronizes with that of the record data are recorded in each sector, by using a reproduction signal of the clock marks; phase difference detection means for detecting a phase difference between a phase of a reproduction signal of the fixed pattern and the phase of the channel clock generated by the channel clock generating means; **phase control data generation means for judging whether or not a present sector is a leading sector in a minimum recording unit in the disk-type recording medium, and generating phase control data by referring to a phase difference data of a previous sector when the present sector is not the leading sector, based on the phase difference data detected by the phase difference detection means;** and phase control means for generating a sampling clock whose phase synchronizes with that of the record data, by controlling the phase of the channel clock based on an output of the phase control data generation means.

Conclusion

9. This application is in condition for allowance except for the formal matters noted above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V Battaglia whose telephone number is (703) 305-4534. The examiner can normally be reached on 5-4/9 Plan with 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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